

AMENDMENTS TO THE CLAIMS

1-12. (Cancelled).

13. (Currently Amended) A method for prognosis of progression of rheumatoid arthritis (RA) and for the evaluation of clinical course by detecting collagenase 3 as a prognostic clinical marker, which comprises:

contacting tissues or body fluids with a substance that ~~is able to bind~~ binds to collagenase 3 mRNA or to collagenase 3;

determining an amount of ~~bounded substance,~~ bounded collagenase 3 mRNA or bounded collagenase 3, and

correlating the amount of ~~bounded substance,~~ bounded collagenase 3 mRNA or bounded collagenase 3, with an amount of collagenase 3 in the tissue or body fluid.

14. (Currently Amended) A method for detecting ~~an increased a~~ genetic predisposition for rheumatoid arthritis (RA) by detecting collagenase 3 as a prognostic clinical marker, which comprises:

contacting tissues or body fluids with a substance that ~~is able to bind~~ binds to collagenase 3 mRNA or to collagenase 3;

determining an amount of ~~bounded substance,~~ bounded collagenase 3 mRNA or bounded collagenase 3, and

correlating the amount of ~~bounded substance,~~ bounded collagenase 3 mRNA or bounded collagenase 3, with an amount of collagenase 3 in the tissue or body fluid.

15. (Previously Presented) The method according to claims 13 or 14, wherein collagenase 3 mRNA expression is determined qualitatively and quantitatively.

16. (Previously Presented) The method according to claims 13 or 14, wherein collagenase 3, both as a pro-enzyme and also in an activated form, is determined qualitatively and quantitatively.

17. (Previously Presented) The method according to claims 13 or 14, wherein catalytic activity of activated collagenase 3 is detected.

18. (Currently Amended) The method according to claims 13 or 14, wherein quantitative relationships between collagenase 3 and ~~its~~ specific or unspecific inhibitors are determined by determination of free collagenase 3 protein and of collagenase 3 protein bound in complexes with inhibitors and compared.

19. (Currently Amended) The method according to claims 13 or 14, wherein synovial membrane preparations, cartilage and bone preparations or preparations of a synovial membrane/cartilage interface, obtained in synovectomies, artificial joint replacement, ~~inter-alia~~ operative interventions, and also in biopsies are used as tissue.

20. (Previously Presented) The method according to claims 13 or 14, wherein synovial fluid or blood are used as body fluids.

21. (Currently Amended) The method according to Claims 13 or 14, wherein collagenase 3 is used as a marker ~~and markers~~ for detection of a more severe progression of RA or a marker ~~markers~~ for detection of an increased genetic predisposition ~~are used~~.

22. (Previously Presented) The method according to claims 13 or 14, wherein collagenase 3 and MT1-MMP and/or gelatinase A are used as prognostic markers by determination of their mRNA or protein expression, their amount and localisation or their catalytic activity in tissues or body fluids.

23. (Previously Presented) The method of claim 21, wherein the marker is an HLA antigen or a marker having certain patterns of HLA antigens.